APPENDIX.

In the
UNITED STATES CIRCUIT COURT OF APPEALS
FOR THE SEVENTH CIRCUIT.

No. 7089. OCTOBER TERM AND SESSION, 1940.

KENNETH S. CLAPP,
Plaintiff-Appellant,
vs.
STEWART-WARNER CORPORATION,
Defendant-Appellee.

Appeal from the District Court of the United States for the Northern District of Illinois, Eastern Division.

December 5, 1940.

Before SPARKS, MAJOR and KERNER, *Circuit Judges.*

SPARKS, *Circuit Judge.* Appellant charged appellee with infringement of United States patent No. 1,570,032 to Baldner, issued January 19, 1926, on an application filed June 7, 1921. This bill also charged appellee with infringement, and the inequitable appropriation, of United States improvement patent No. 1,980,117 to Clapp and Eickhoff. Both of these patents were owned by appellant at all times here in question. The defenses were invalidity and non-infringement. Claims 2, 3, 4 and 13 of the Baldner patent, and claims 1, 8, 13, 22 and 27 of the Clapp patent were relied upon. At the trial, however, appellant withdrew his charges of infringement as to claims 8, 13, 22 and 27 of the Clapp patent.

Special findings of fact were filed by the court, upon which it concluded that appellee had not infringed claim 1 of the Clapp patent, or any of the claims at issue of the Baldner patent. The decree was in accordance with the conclusions of law, dismissing the complaint as to both patents for want of equity. The appeal is from that part of the decree which affects only the Baldner patent.

This patent, which is a continuation in part of the patentee's then pending application, serial No. 453,978, filed March 21, 1921, relates to dispensing apparatus for plastic or semi-fluid materials, and more particularly to measuring means therefor, by which the discharge is regulated in measured quantity. Its primary object is to simplify

the structure and the means and mode of operation of such apparatus, whereby it will be cheaper in construction, more efficient in use, positive in operation, uniform in action and accurate. Other objects are to provide a dispensing apparatus with a control device which will insure the uniform and continuous discharge of the material in measured quantities; to provide automatic control means by which the discharge mechanism will be automatically arrested when a predetermined quantity of the material has been ejected; to provide means for readily adjusting the apparatus to discharge the material in greater or less measured quantity; to further provide for automatic coin or finger control for setting the mechanism in operation; and to provide in conjunction with the dispensing apparatus a booster, or ejector pump, to insure uniform and continuous discharge.

The patented apparatus comprises a container for the material which is discharged in measured quantity. The container rests upon a base which contains the dispensing, or ejecting apparatus, and the base is provided with an inlet opening with which the open bottom of the container registers. The bottom of this base, or housing, comprises a plurality of parallel, semi-circular grooves which communicate with concentric bores, or circular passages in the housing, and extend beyond the receiving opening. Located in each of the semi-circular grooves, and extending into the corresponding bore, is a revoluble spiral conveyor, of which there may be any number in the series. These conveyors extend a sufficient distance through the bores to afford ample bearing therein for the conveyor screws, while at the opposite end, the conveyor screws are provided with trunnions or drive shafts, having bearings in the terminal wall of the receiving recess, through which they extend into the adjacent pocket, or chamber, where they carry intermeshing gear pinions.

The drive shaft of one of the conveyor screws is extended beyond the housing of the base to afford a drive connection for the series of conveyor screws. The conveyor screws may be manually operated by means of a hand crank, or they may be motor driven. The shaft extension is, or may be, provided with a beveled gear pinion with which meshes a second pinion upon a vertically disposed drive shaft. Carried by the shaft is a worm wheel, with which meshes a worm upon the armature shaft of a driving motor. Upon operation of the driving motor, the spiral conveyors will be simultaneously actuated to dis-

charge grease or other plastic or semi-fluid material from the container, through the lateral boxes into the pressure chamber formed at one end of the base or housing. The bores all communicate with this pressure chamber and simultaneously discharge thereinto.

At its upper end the vertically disposed drive shaft carries a bevel gear, meshing with a similar gear upon a transverse shaft to which may be connected a hand crank for hand operation of the apparatus. Whether by hand crank or motor, the worm wheel will be connected to the shaft by a pawl and ratchet. Thus far described, the mechanism is substantially that disclosed and claimed in Baldner's co-pending application.

Leading from the pressure chamber of the base is a discharge conduit, in which is a rotary power-driven meter, comprising a cylindrical housing having inlet and outlet passages. Mounted eccentrically within the circular housing is a rotor having therein two oppositely disposed overlapping sliding blades or vanes. These are bifurcated on their inner edges to receive a spring by which the blades are forced apart and against the wall of the housing as the rotor revolves. During the rotation of the rotor the blades reciprocate to and fro, maintaining at all times their bearing contact upon the interior walls of the cylinder under the influence of the spring.

The grease or other plastic or semi-fluid material enters the cylinder from the pressure chamber through the inlet passage, filling the space immediately back of the blade until the succeeding blade passes the inlet part, whereupon the charge of material is forcibly advanced by the movement of the blade.

The capacity of the spiral conveyors is greater than that of the rotary meter so that the material is always maintained in the pressure chamber and supplied thence to the rotary meter under a relatively high pressure. The excess material advanced by the spiral conveyor merely leaks back, or when the bores are filled to the maximum pressure, no more material can be forced therein and the material will merely push backwardly into the container, thus insuring at all times an ample supply of material under pressure at the inlet part of the rotary meter, which in turn insures the intake chamber of the meter being fully and completely filled at a uniform pressure at each rotation of the rotor. This intake chamber being of a predetermined capacity receives a like charge at each half rotation of the rotor,

and serves as a unit of measurement. The rotary meter is so designed that a predetermined number of rotations shall equal exactly one pound, or a pint, or a quart of the material as desired by the purchaser.

Upon rotation of the blades, the charge of material received upon the cylinder is discharged upwardly through the outlet and the discharge conduit. The rotor is positively driven by means of a bevel gear upon the shaft of the rotor, meshing with a similar gear upon a vertically disposed shaft, mounted in a suitable bearing in the top wall of the pressure chamber. At its lower end the vertical shaft carries a gear pinion meshing with a similar pinion upon a stub shaft carried by one of the spiral conveyors, thus driving the rotary meter and the spiral conveyors in unison.

The specifications continue in a lengthy description of Baldner's meter, or measuring device, and its operations. That part of the description is considerably longer than that which we have heretofore set out. It specifically describes the means by which the predetermined amount of the material desired by the purchaser may be delivered to him immediately by either manually operating a switch to start the motor or by a coin-controlled means by which the switch is closed upon the insertion of a coin of proper size.

It is suggested by appellant that it is not necessary for us to consider this part of Baldner's disclosure, because it is not contended that appellee has infringed this particular feature. This, indeed, is quite true, and while it is not necessary to set forth this particular specification, yet it is quite proper for us to consider the entire specification in order to determine the real content of Baldner's claims.

The claims in issue[1] disclose a combination whose elements are conceded to be old in the art. It is a lubricant-

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[1] "2. In an apparatus of the character described, the combination with a supply reservoir of two separate ejector mechanisms communicating therewith and interconnected in series whereby one ejector supplies the other, the initial ejector being of greater capacity than the second ejector, the second ejector acting to impede the normal output of the first ejector, and discharging the material, at lower pressure, and means to operate said ejectors in unison, the quantity of discharge being measured at the full capacity of the second ejector.

"3. In an apparatus of the character described, a reservoir, an ejector communicating therewith dividing the discharged material into successive charges of known capacity and conveyor means for supplying the material to the ejector in quantity greater than its capacity whereby said ejector will act to impede the normal flow of the material under influence

vending machine, pure and simple. Of course, the amount of lubricant sold is governed by the demand of the customer and is subject to as many variations as there are customers. The accused devices are two types of machines known as "Alemite Rock Crushers," both of which are motor-driven lubricant compressors adapted to deliver grease through a hose conduit to automobile lubricant fittings, where grease is delivered to bearings under pressure of five thousand pounds and higher, per square inch. They are also called grease guns. One type is driven by compressed air and the other by electricity. Each type comprises a funnel-shaped reservoir to contain a supply of lubricant, at the lower part of which is a helical screw conveyor positioned vertically in the hopper. This conveyor is rotated by a ratchet which advances one notch with each stroke of the compression pump. The step by step rotation of the helical screw slowly advances grease from the reservoir towards the reciprocating pump, located at the bottom of the reservoir and below the screw conveyor. When the plunger of the reciprocating pump is in a retracted position, the advancing grease advanced from the reservoir is forced into the cylinder of the reciprocating pump and, under the influence of the power means, the plunger or piston of the reciprocating pump is alternately driven into the cylinder and retracted therefrom. On its forward movement, the piston drives the grease in the cylinder through an outlet valve (through which the grease cannot return), into a hose which is equipped at its forward end with a coupling member for attachment to the fittings of the bearing to be lubricated. Continued operation of the motor will pump grease through the hose into the fitting through which the automobile bearing is lubricated. If the moving lubricant meets with resistance because of dirt, rust, or

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of the first ejector and will be operated at full capacity to discharge the material in known measured quantity.

"4. In an apparatus of the character described, a reservoir, an auxiliary pressure chamber communicating therewith, means for discharging the contents of the reservoir, into said chamber under pressure, a discharge conduit and an intermediate measuring chamber of known capacity communicating alternately with the pressure chamber, and with the discharge conduit for discharging the material from said pressure chamber in measured quantity."

"13. In an apparatus for dispensing plastic material in measured quantity, the combination with a reservoir and an ejector means therefor, advancing the material under pressure, of a discharge conduit and a flow regulating device controlling the discharge outlet normally resisting the advance of material under influence of the ejector and permitting the escape thereof in measured quantity, and means for actuating the regulator in accordance with the quantity of material advanced by the ejector means."

dried grease in the fitting or bearing, the motor will compress the grease until the resistance is overcome, the machines being capable of building up grease pressure of more than five thousand pounds per square inch.

These "Alemite Rock Crushers" are never sold as metering or measuring devices, and could not be so used. They are always sold and used with a delivery hose attached, the hose being fitted at its forward end with a coupler by which it is attachable to the lubricant fitting. There is no meter or gauge of any kind included in the structure which is used or usable to measure the quantity of grease discharged, and in lubricating a car there is no way of knowing how many cubic inches of lubricant may be used. In these devices the worm or screw in the reservoir advances the grease slowly and under very low pressure of not more than three pounds per square inch into the cylinder of the high pressure lubricating delivery pump, the vacuum created in the cylinder by retraction of the piston being largely responsible for filling the cylinder with grease.

It is clear that the patented device is not infringed by the accused structures. They do not perform the same functions, and the means and results are entirely different. It was pointed out by the District Court that in the patented article the greater pressure was in the upper chamber, and the lesser pressure was in the lower chamber, while in the accused structures it is just the reverse. Great pressure is not necessary in the operation of the patent, for the inventor was only concerned in delivering the measured amount into any receptacle of the purchaser's choosing. A different problem, however, confronted appellee, for its object was to deliver the grease to the different bearings in the automobile through a hose, and this admittedly requires a great deal of force. Appellee was not concerned with the exact amount that it was delivering for the benefit of the purchaser. Its object was to deliver whatever was necessary for greasing the bearings, and no one could tell how much that would be. Under these circumstances a meter was not necessary to accomplish appellee's objects, and the accused devices have no such means.

It is contended by appellant, however, that appellee uses the equivalent of a meter. He argues that when the lower chamber is filled to its capacity with grease from the upper chamber, that constitutes a measured amount in the lower chamber; and as this amount is thus separated from the

upper chamber, it is in that sense a measured amount and reads upon the claims of the patent. We cannot accept this interpretation. There is no measuring of the amount used by the accused structures. True, the amount used in the lower chambers of the accused devices is limited by the capacity of the lower chamber, but this cannot be considered as a measurement in the sense that Baldner used it, for his measurement in no way depended upon the capacity of the lower chamber but rather upon the demand of the customer. His measurement had to be accurate, and it was quite necessary for him to have an accurate meter in order to compensate for the price he was to receive for it. When these claims are read and interpreted in the light of Baldner's specification and description, it is obvious that they do not read upon the accused structures.

Having thus limited the patent to a metering or measuring device, operating as Baldner described it, we find it unnecessary to pass upon the question of validity. Because of the lack of infringement, the District Court dismissed the complaint for want of equity. Assuming without conceding that the accused structures, so far as they go, use precisely the same means as the patent uses, yet appellee could not be held for infringement, for Baldner has no patent on anything less than his entire combination.

Other questions are raised which bear on the question of validity. However, appellee admits no concern in the question of validity, in view of our interpretation of the patent. While the District Court held the patent was invalid, even if there was infringement, yet, it cited no specific prior art upon which that judgment was based. Under these circumstances we deem it unnecessary to express any opinion on the question of validity, and leave appellant with the benefit of the presumption which the issuance of the patent bestows upon it.

DECREE AFFIRMED.

A true Copy:

Teste:

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Clerk of the United States Circuit Court of Appeals for the Seventh Circuit.